The thermal properties of carpets is an important factor in the apparent comfort of occupants in a building. Significant factors include energy savings due to reduced heat loss.

Where there is underfloor heating, the thermal properties need to be matched to the system.

The WIRA Thermal Comforting Tester uses a Guarded Hot Plate Method to measure the steady-state transfer of heat through the sample. The apparatus accommodates samples that are 500mm square.

The apparatus is connected to a measuring system to record the temperature by means of thermocouples placed within the apparatus and power measurement of the heater. From the information recorded the thermal properties of the material under test can be calculated.

The test is also appropriate for a wide variety of other applications.


Protective clothing is expected to provide protection against heat and fire. The WIRA Flame Heat Test Apparatus determines the heat transmission on exposure to flame.

The specimen is subjected to a flame from a gas burner. The heat passing through the specimen is measured by means of a calorimeter that is in contact with the back of the material. The time is recorded for the temperature to rise to 24°C.

The Specimen Support Frame is mounted on a support stand so that the specimen is supported at the required distance above the gas burner.

Standards: EN367:1992